Draft CHESAPEAKE BAY TMDL

Restoring New York's waterways and Chesapeake Bay

Public Meeting
Binghamton, New York
October 27, 2010

www.epa.gov/chesapeakebaytmdl

Today's Agenda

- **EPA presents draft TMDL**
  - Rich Batiuk, Chesapeake Bay Program Associate Director for Science
  - Bob Koroncai, Chesapeake Bay TMDL Manager
- **New York presents WIP**
  - Peter Freehafer, Chesapeake Bay Program Coordinator NYDEC
- **Question & Answer**
- **More information**
  www.epa.gov/chesapeakebaytmdl

First…The Bottom Line

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Lack of progress triggered TMDL

The launch site at Canisteo Park. The river carries a lot of muddy silt that is especially evident at this site.

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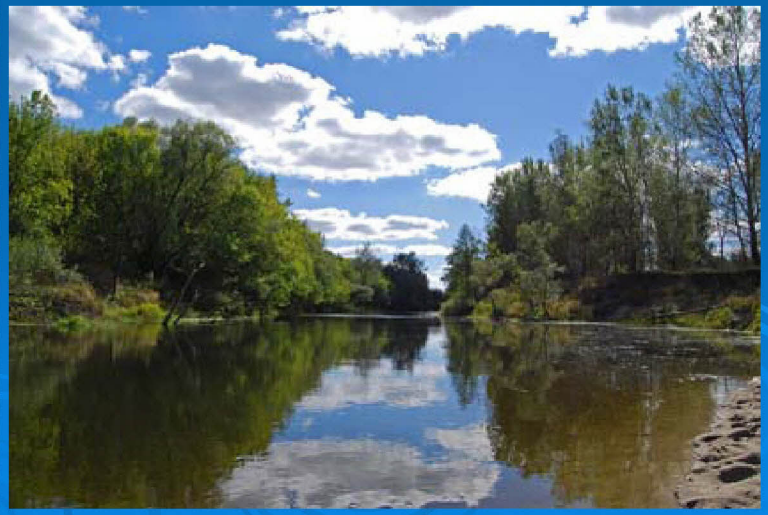
TMDL is a "pollution diet"

For your streams, creeks and rivers



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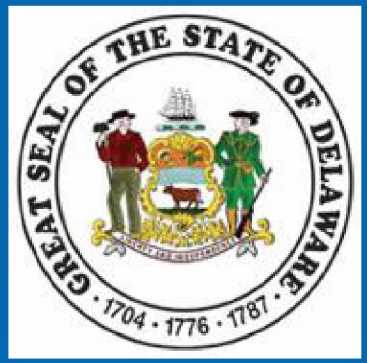
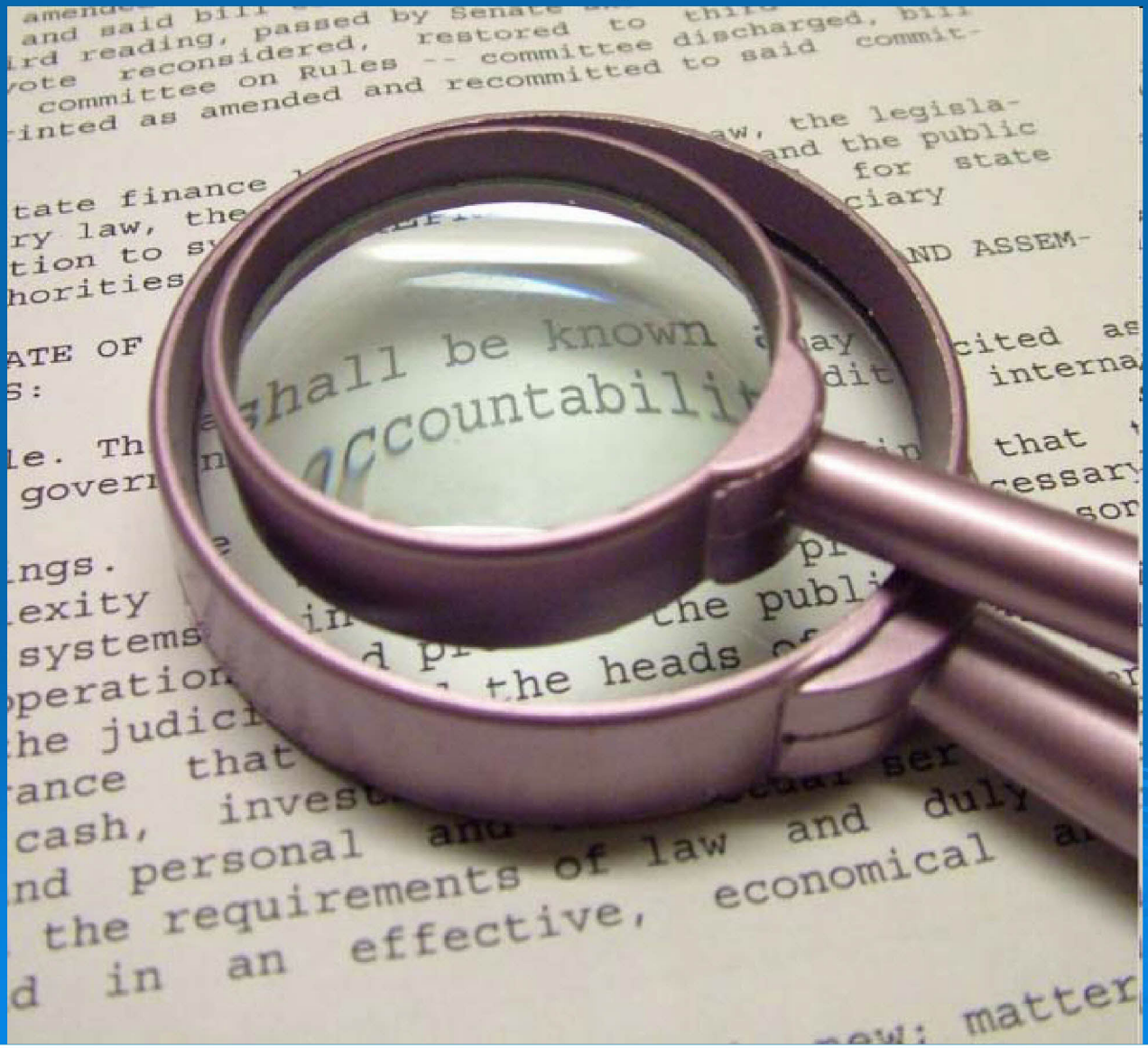
Blend of state actions and federal measures



Accountability for results



Task not easy but essential

What is a TMDL?

And Why Does it Matter?

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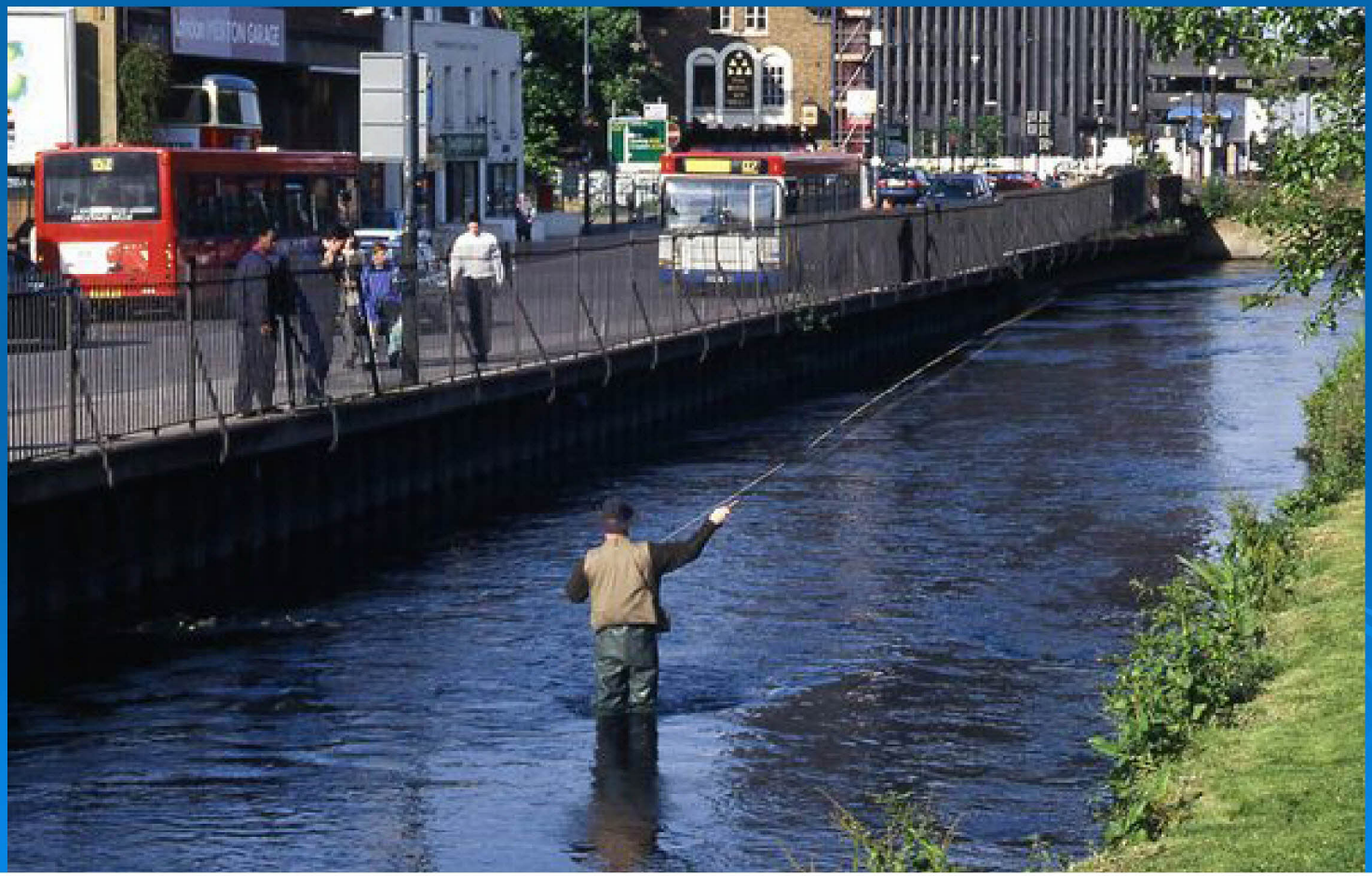
Clean Water Act requires TMDL for waters that don't meet state standards

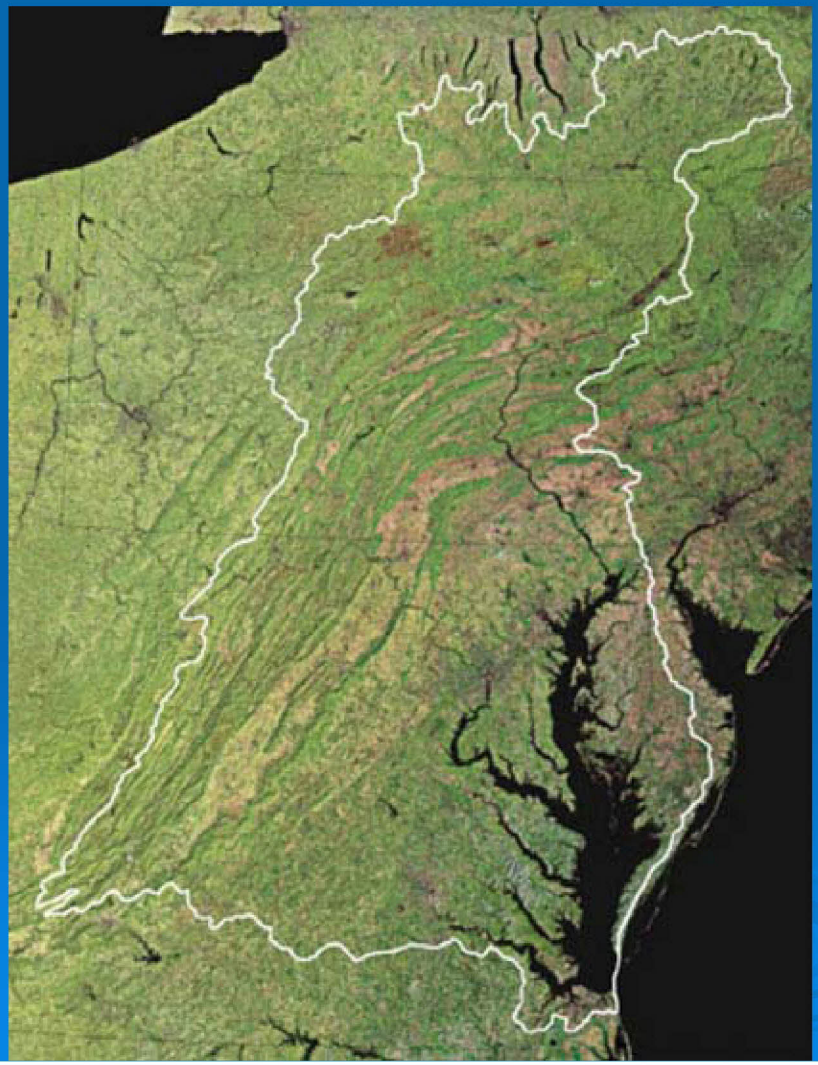
TMDL = Total Maximum Daily Load

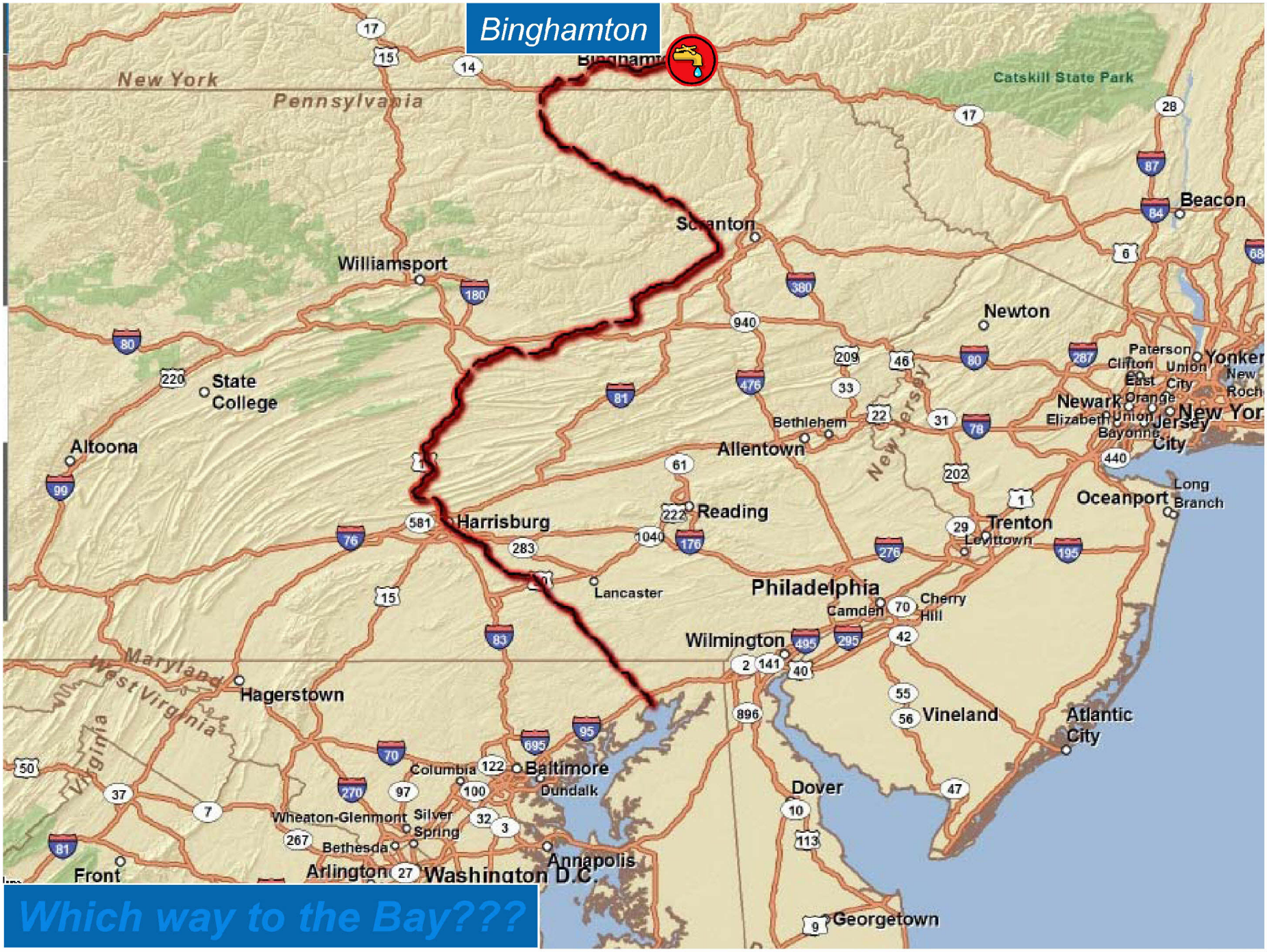
Defines amount of pollution a water body can handle and be healthy



Bay and tributaries are polluted by nitrogen, phosphorus, sediment

Rivers, streams, & creeks contribute to Bay, so included in TMDL




Binghamton
New York
Pennsylvania
Catskill State Park
Scranton
Williamsport
Beacon
Newton
State College
Altoona
Bethlehem
Allentown
Harrisburg
Reading
Lancaster
Philadelphia
Camden
Cherry Hill
Trenton
Levittown
Oceanport
Long Branch
Wilmington
Hagerstown
Maryland
West Virginia
Virginia
Vineland
Atlantic City
Columbia
Baltimore
Dundalk
Dover
Wheaton-Glenmont
Silver Spring
Bethesda
Arlington
Washington D.C.
Annapolis
Front
Georgetown
Which way to the Bay???

AR0028537

Legal obligation to get it done

Part of strategy to meet a Presidential Executive Order

Clean water matters to your community

Clean water matters to your community

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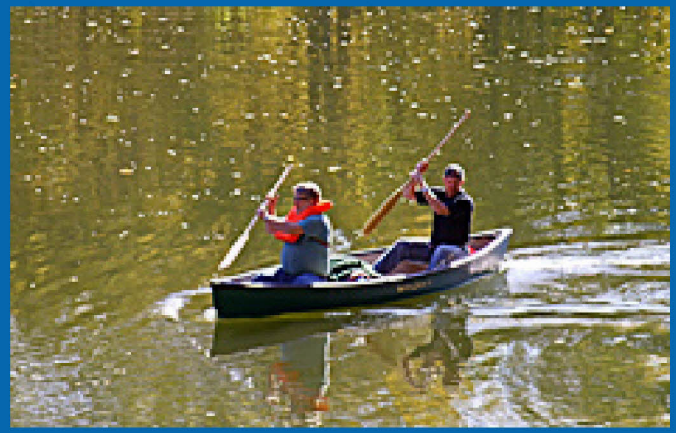

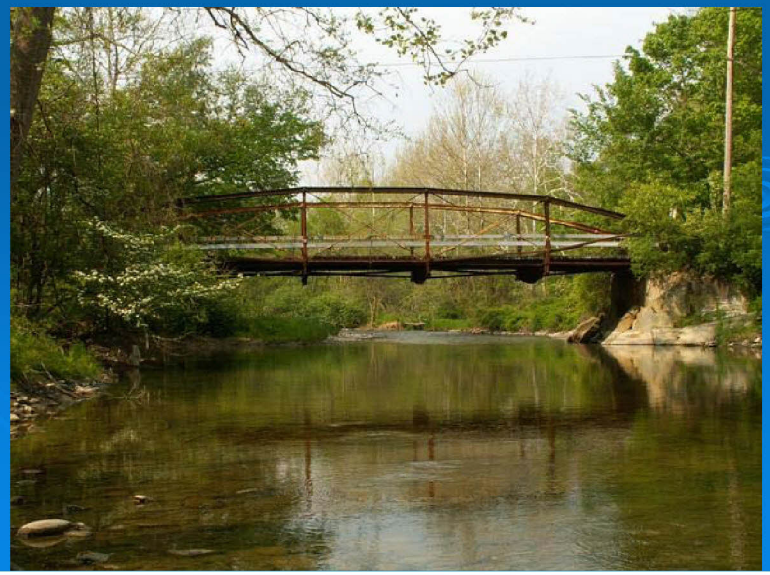

The Economic Impact

- Clean water can increase the value of single-family homes up to 4,000 feet from the water's edge by up to 25 percent.
- Philadelphia estimates that installation of green stormwater infrastructure will raise property values 2 to 5 percent, generating $390 million over the next 40 years.
- For every $1 spent on drinking water protection, an average of $27 is saved in water treatment costs.

Setting the Pollution Diet

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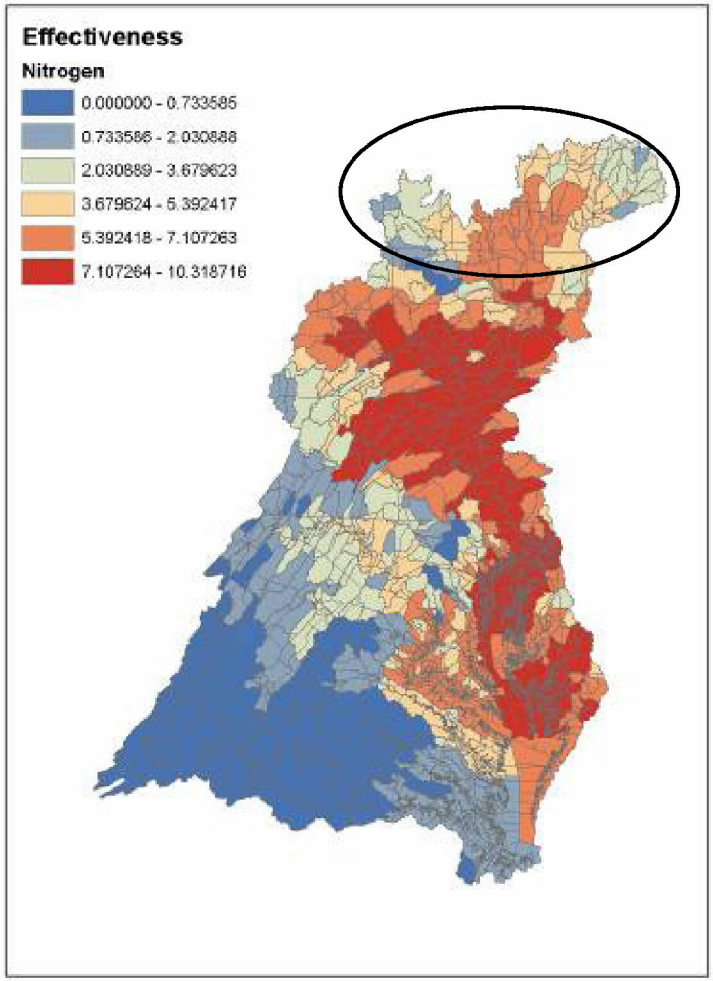
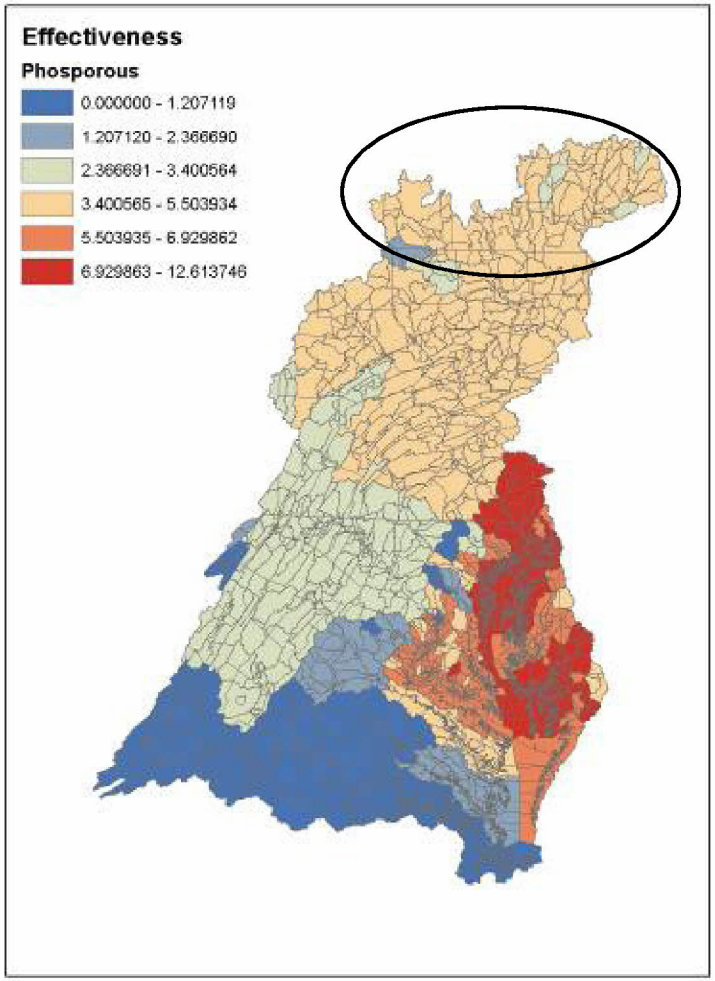
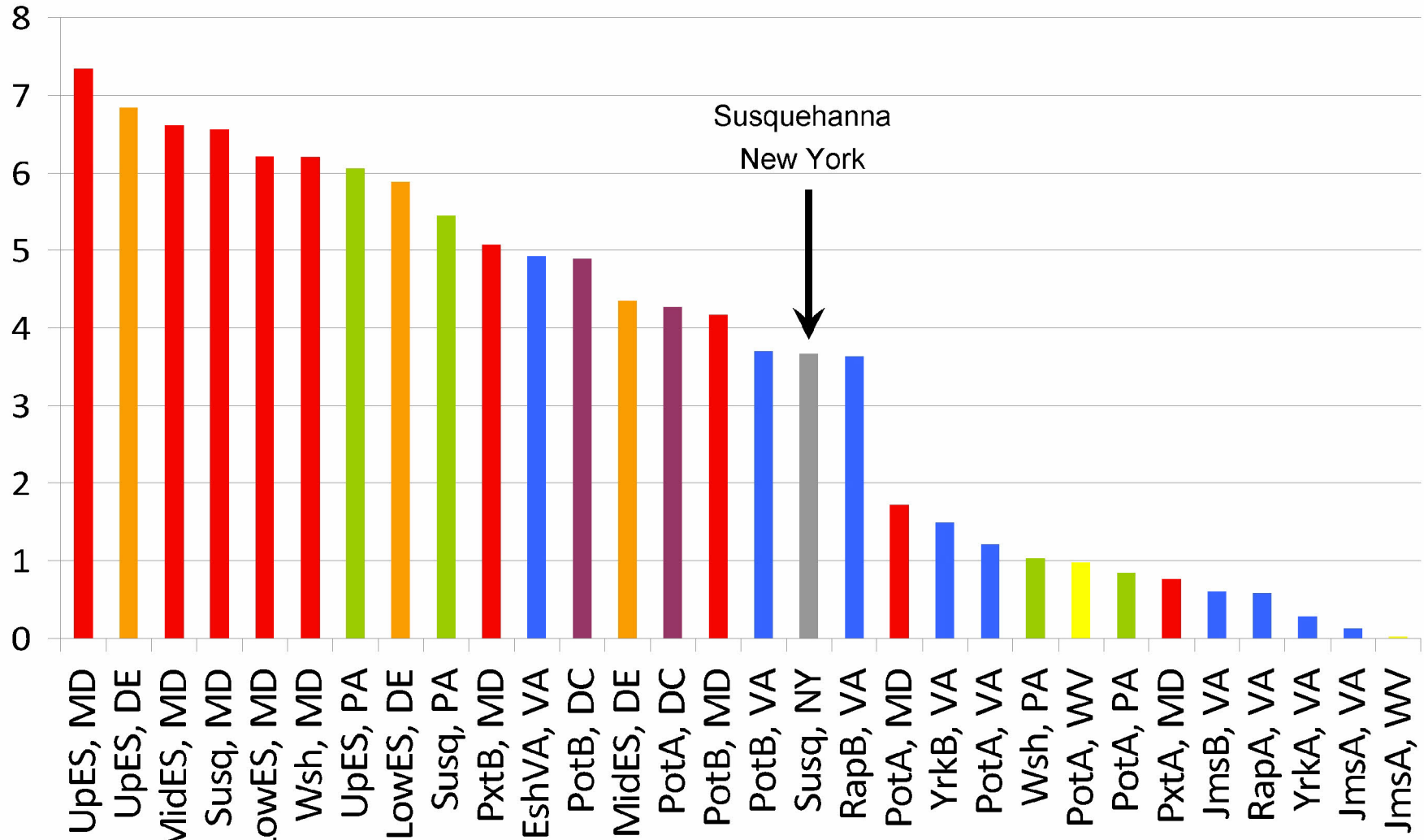
Impact of Pollution

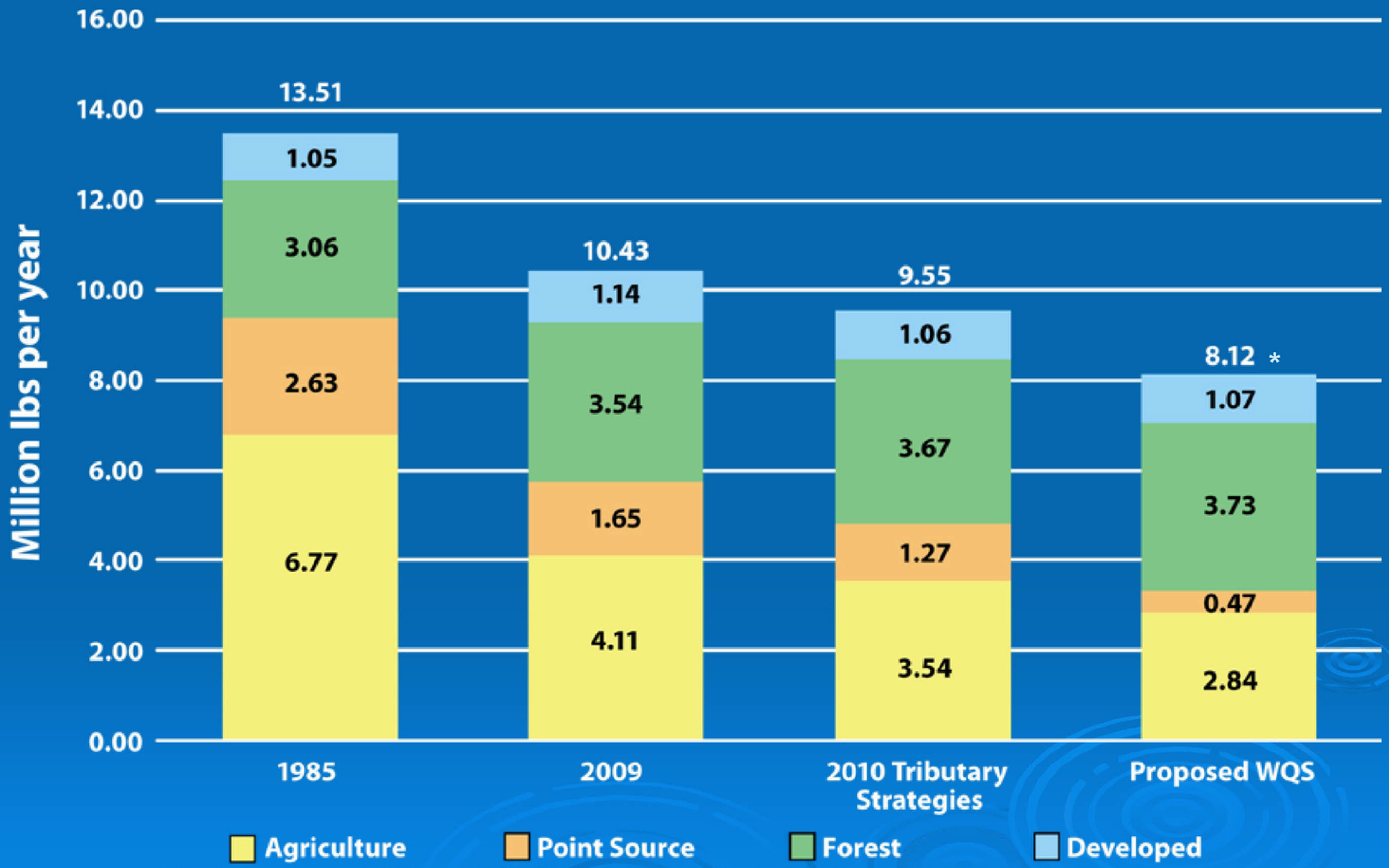




Major River Basin by Jurisdiction Relative Impact on Bay Water Quality



NY Nitrogen Loads by Sector and Scenario—CBP Watershed Model P5.3



* Includes an additional 750,000 pounds nitrogen allocation

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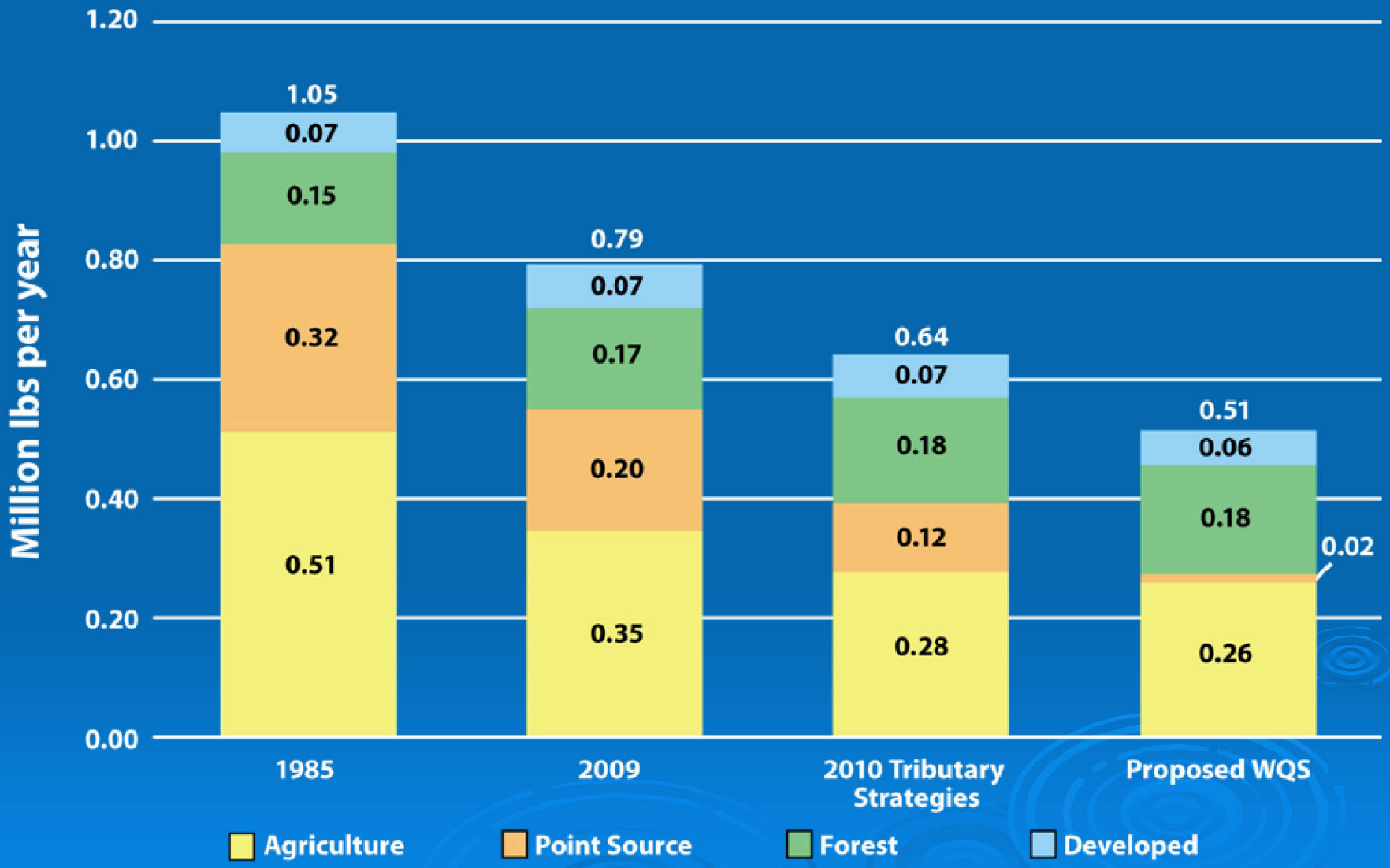
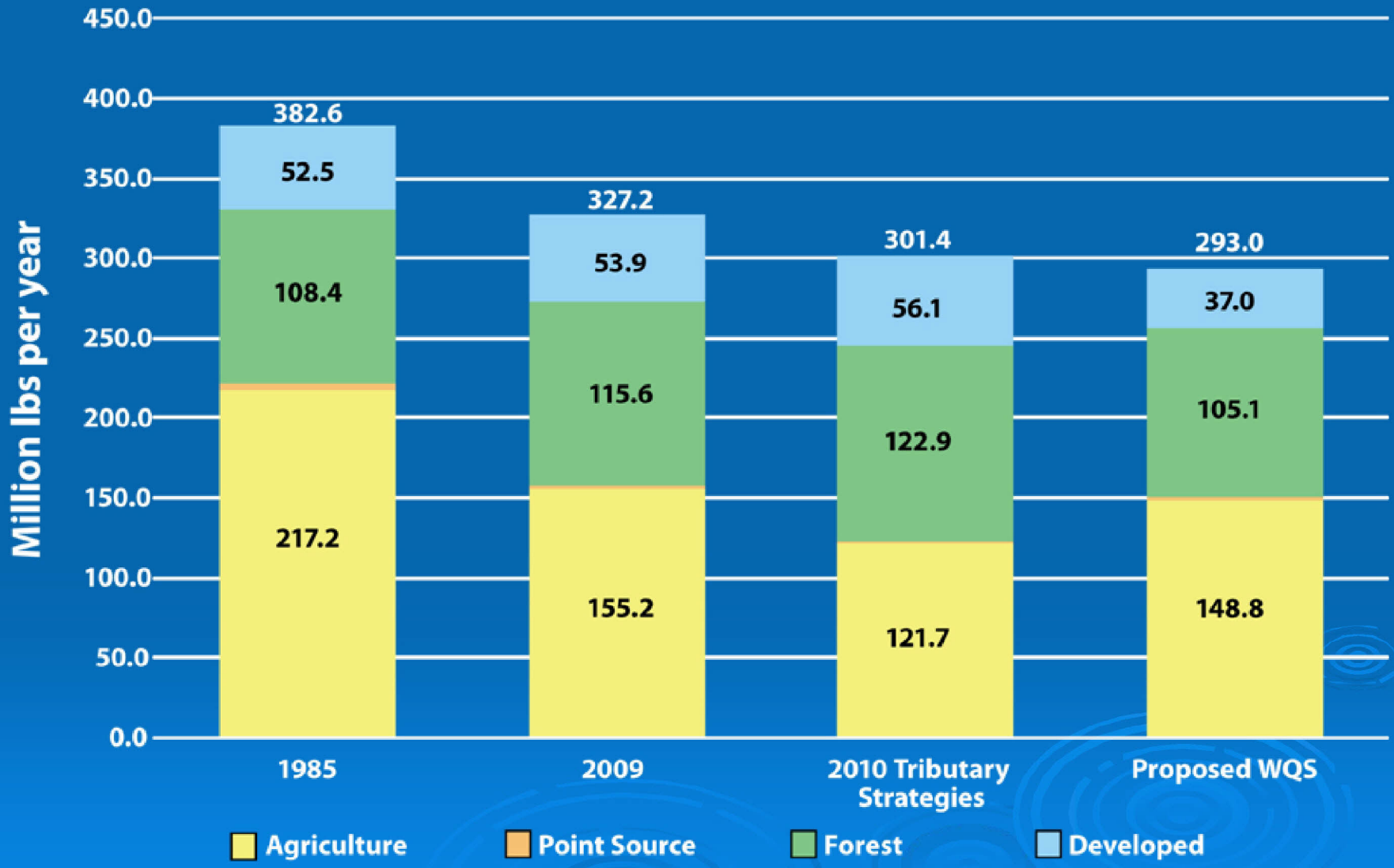
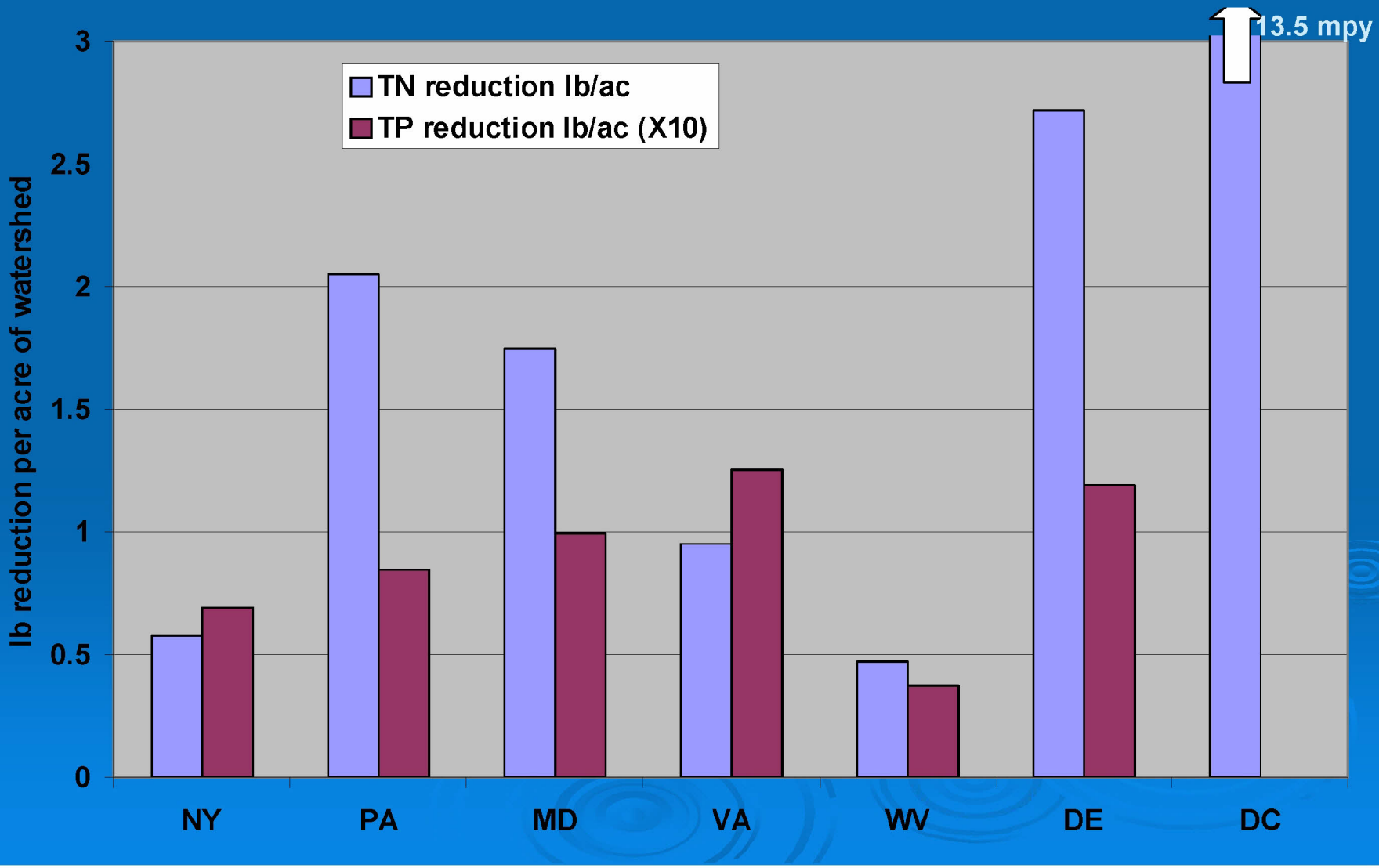
NY Phosphorus Loads by Sector and Scenario—CBP Watershed Model P5.3



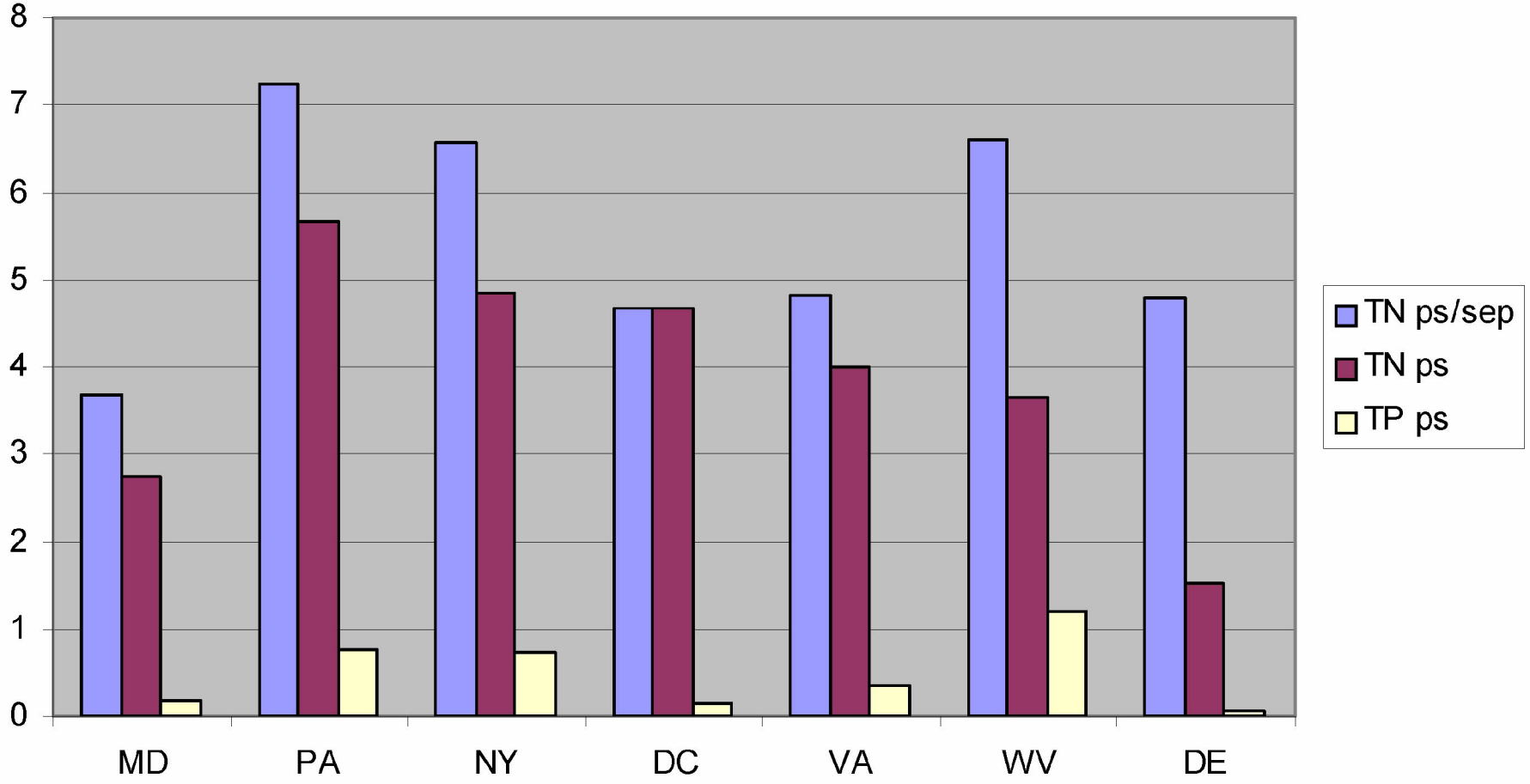
NY Sediment Loads by Sector and Scenario—CBP Watershed Model P5.3



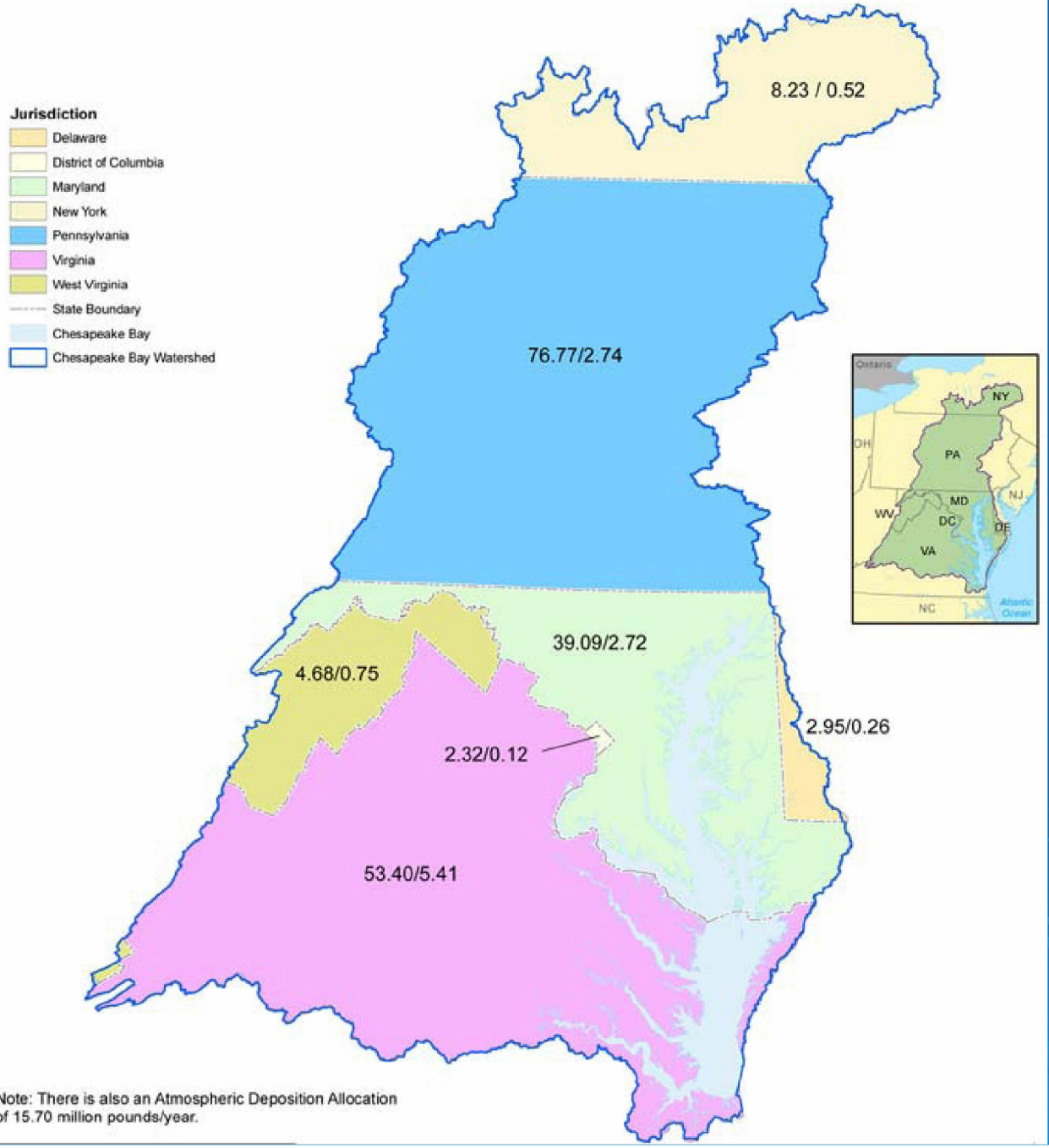
The TMDL Requires Low Load Reductions in NY



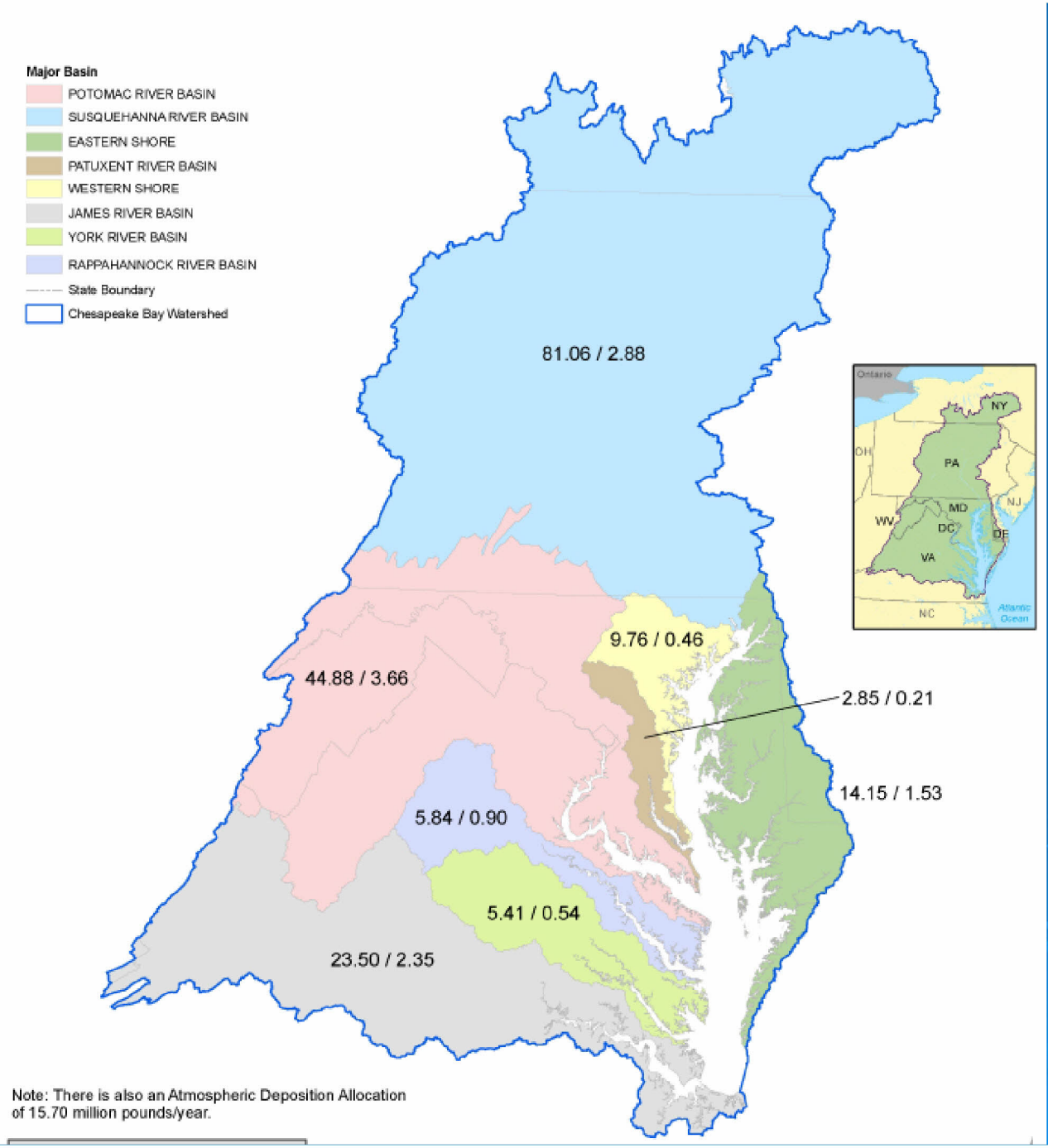
Wastewater/Septic System Per Person Edge of Stream Load



Pollution Diet by State



Pollution Diet by River



TMDL Goals

2 year milestones

60 percent by 2017

100 percent by 2025

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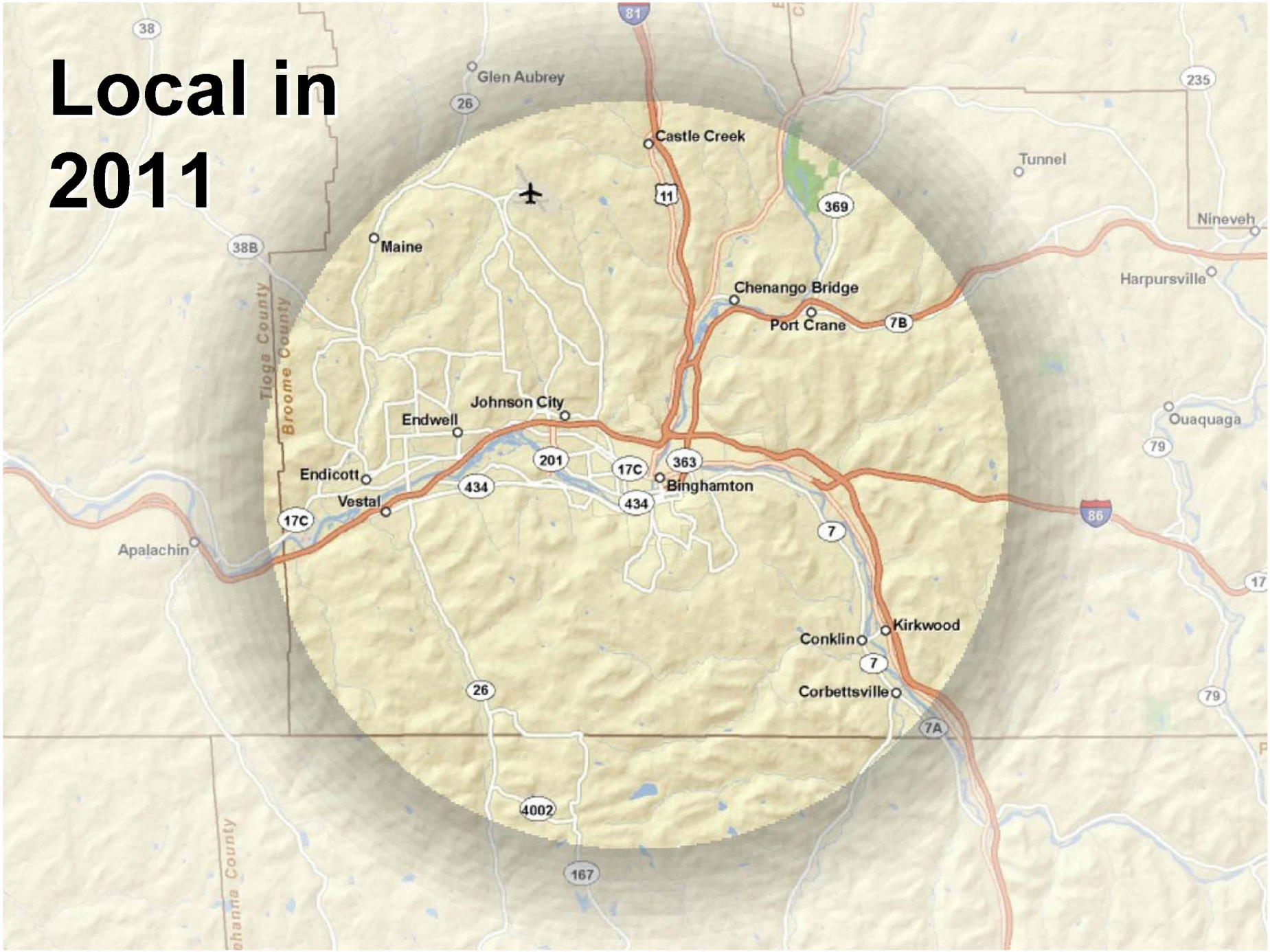
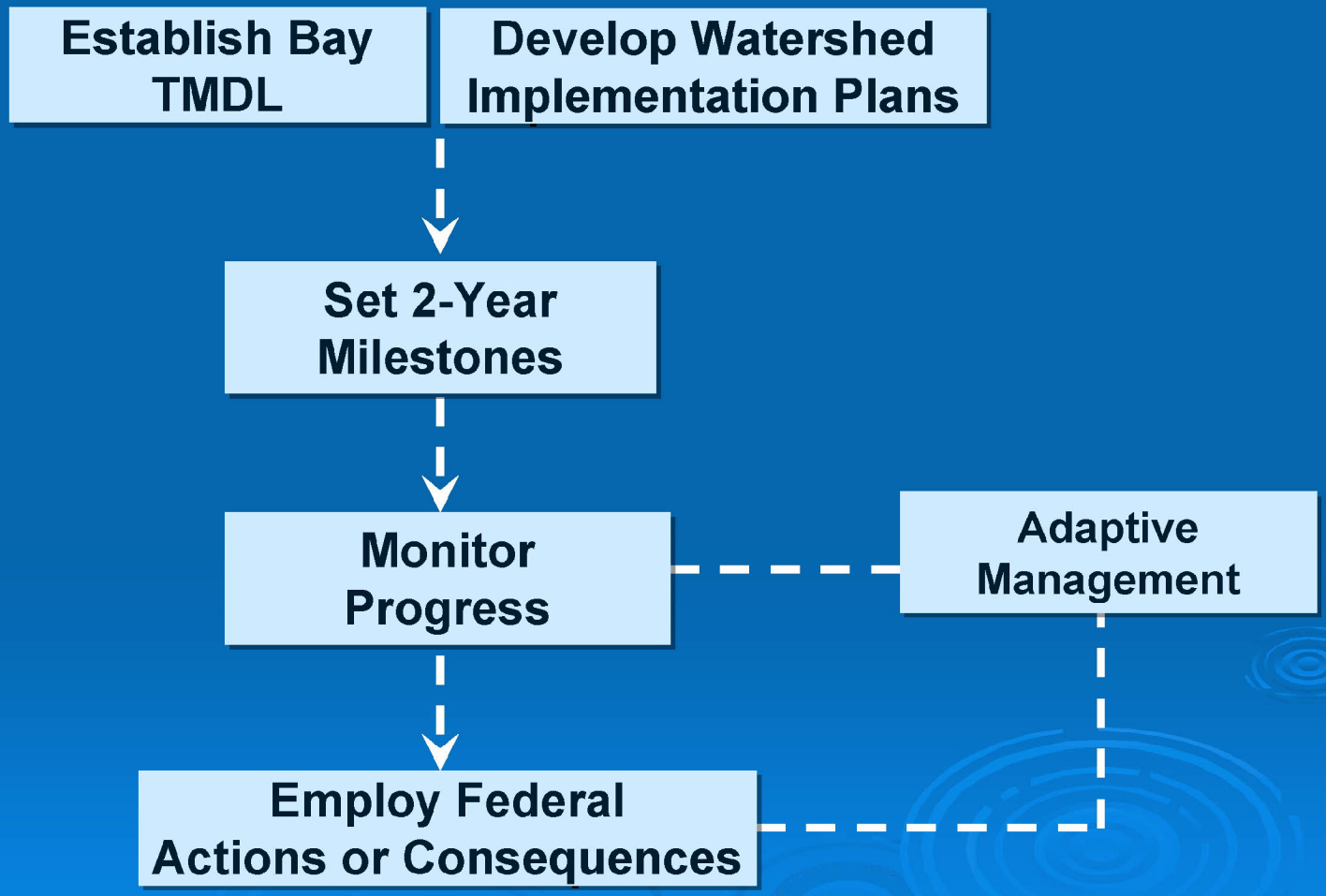
Local in 2011



Accountability for Results



Meeting the Pollution Diet

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Watershed Implementation Plan

The how, when and where
of attaining the TMDL diet

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Overall Draft WIP Evaluation

- 7 jurisdictions provided Draft WIPs in early September
- WIPs must:
  - achieve pollution targets
  - provide reasonable assurance

Do WIPs meet the allocations?

Jurisdiction	Nitrogen	Phosphorus	Sediment
DC	✓	✓	
DE			✓
MD	✓	✓	✓
NY			✓
PA	✓		
VA			✓
WV		✓	

Draft New York WIP Evaluation

- Met sediment allocation
- Did not meet nitrogen (15 percent over)
- Did not meet phosphorous (14 percent over)

Overall Draft WIP Evaluation

None of the WIPs provided adequate assurance

- Inadequate strategy for filling program gaps
- Limited enforceability/accountability
- Few dates for key actions

Federal Backstops

- All jurisdictions require some level of backstop to:
  - Meet the pollution allocations
  - Provide a high level of assurance
- Backstop allocations focus on federal authority
  - Additional reductions from regulated point sources (wastewater treatment plants, CAFO, MS4s)
  - Finer scale allocations for headwater states

Federal Backstops

- **Backstop allocation adjustments**
  - Minor - adjust load allocations to equal targets
  - Moderate -
    - Stronger CAFO/MS4 requirements
    - Significant WWTPs: N @ 4 mg/l, P @ 0.3 mg/l
  - High Backstop –
    - Stronger CAFO/MS4 requirements
    - Significant WWTPs: N @ 3 mg/l, P @ 0.1 mg/l

Backstops by Jurisdiction

- Maryland, DC – Minor Backstop
- Virginia – Moderate Backstop
- Delaware, Pennsylvania, New York and West Virginia – High Backstop
- Headwater States (PA, NY, WV)
  - EPA assigning finer scale wasteload and load allocations

Draft New York WIP Evaluation

For New York: high backstop

- Insufficient detail on quantifying the gaps, proposed gap-filling strategies and associated actions, and timeframes to assure that the necessary reductions would be achieved by 2017 and 2025
- Need to provide assurance for compliance and enforcement with existing programs across source sectors

Draft New York WIP Evaluation

For New York: high backstop

- Wastewater facilities: limit of technology (3 mg/L TN and .1 mg/L TP) at design flow
- MS4s: 50% of urban MS4 lands meet aggressive performance standard through retrofit/ redevelopment; 50% of unregulated land treated as regulated (25% of unregulated land meet aggressive prefromance)
- Construction: Erosion and sediment control on all lands subject to Construction General Permit
- CAFO production areas: Waste management, barnyard runoff control, mortality composting. Precision feed management for all animals. Same standards apply to AFOs not subject to CAFO permits EXCEPT no feed management on dairies; designation as necessary

In Summary

- Hybrid TMDL is blend of jurisdiction WIPs and EPA backstop allocations
- Final WIPs need to address deficiencies
- EPA prefers to use jurisdiction WIPs and not backstop in final TMDL

Opportunities for Improvement

- Jurisdictions can enhance their WIP submissions by the November 29 deadline
  - EPA will engage jurisdictions in discussions
  - EPA will evaluate the final WIPs
  - Final TMDL will be informed by final WIPs

Next Steps

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Next Steps

- Hold 18 public meetings in six states, D.C.
- Public comment period until November 8
- States, D.C. submit final WIPs on November 29
- TMDL will be established by December 31

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Submit Your Comments

- Public comment period until November 8
  - Electronically, visit:
    www.regulations.gov
    Docket ID No. EPA-R03-OW-2010-0736
  - In writing, mail to:
    Water Docket, EPA, Mailcode: 2822T
    1200 Pennsylvania Ave., NW.,
    Washington, D.C., 20460.
  - By hand, drop off from 8:30 a.m. - 4:30 p.m.:
    EPA Docket Center Public Reading Room,
    EPA Headquarters West, Room 3340,
    1301 Constitution Ave., NW, Washington, D.C.

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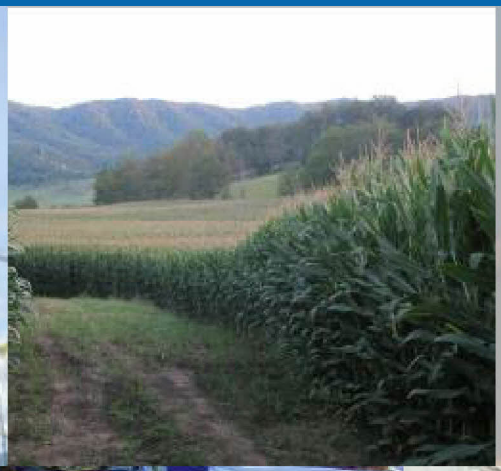







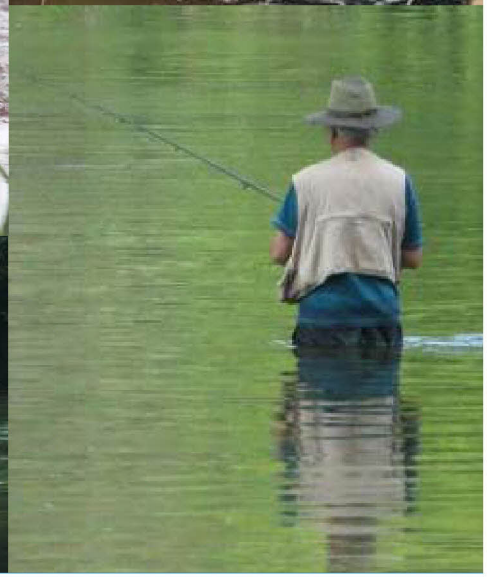

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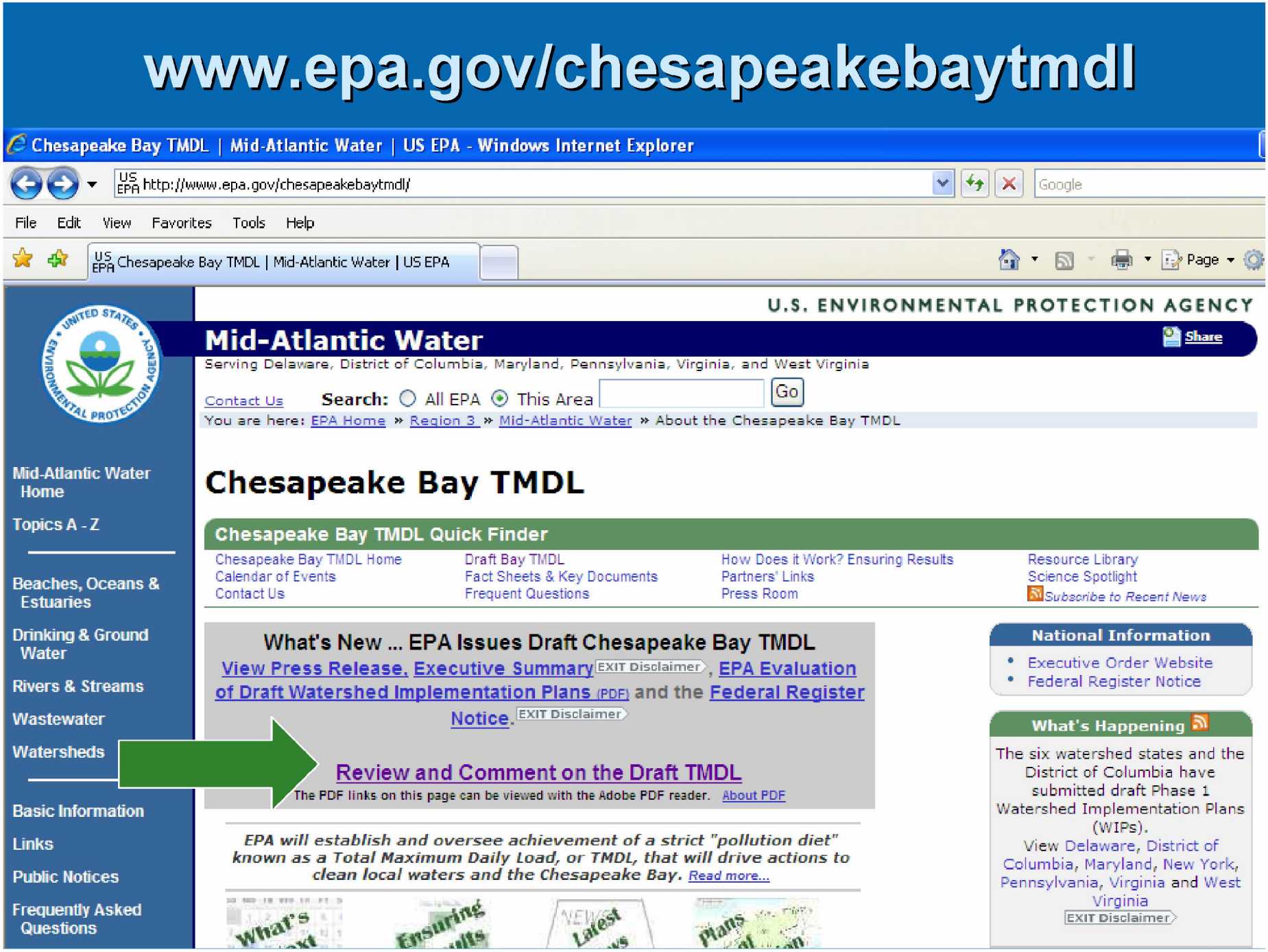

New York has THE LOWEST percent of E3 of any basin